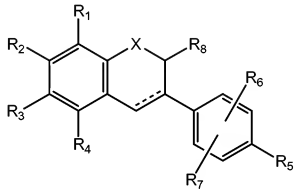
Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously presented) A method for promoting and/or enhancing the rate of repair of UV-induced, DNA mutagenic damage in skin which comprises administering topically to the skin after UV exposure a composition , said composition comprising one or more compounds of the general formula (II):

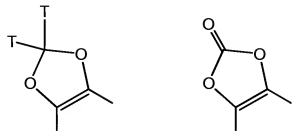


(II)

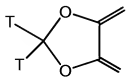
in which

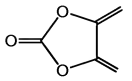
R_1,R_2, R_3 and R_4 are independently hydrogen, hydroxy, OR_9, $OC(O)R_{10}$, $OS(O)R_{10}$, CHO, $C(O)R_{10}$, COOH, CO_2R_{10}, $CONR_{11}R_{12}$, alkyl, haloalkyl, arylalkyl, alkenyl, alkynyl, aryl, heteroaryl, alkylaryl, alkoxyaryl, thio, alkylthio, amino, alkylamino, dialkylamino, nitro or halo, or

R_3 and R_4 are as previously defined, and R_1 and R_2 taken together with the carbon atoms to which they are attached form a five-membered ring selected from



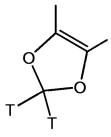
R_1 and R_4 are as previously defined, and R_2 and R_3 taken together with the carbon atoms to which they are attached form a five-membered ring selected from

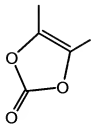




, or

R_1 and R_2 are as previously defined, and R_3 and R_4 taken together with the carbon atoms to which they are attached form a five-membered ring selected from





and

wherein

R_5, R_6 and R_7 are independently hydrogen, hydroxy, OR_9, $OC(O)R_{10}$, $OS(O)R_{10}$, CHO, $C(O)R_{10}$, COOH, CO_2R_{10}, $CONR_{11}R_{12}$, alkyl, haloalkyl, arylalkyl, alkenyl, alkynyl, aryl, heteroaryl, thio, alkylthio, amino, alkylamino, dialkylamino, nitro or halo,

R_8 is hydrogen, hydroxy, alkyl, aryl, amino, thio, $NR_{11}R_{12}$, $CONR_{11}R_{12}$, $C(O)R_{13}$ where R_{13} is hydrogen, alkyl, aryl, arylalkyl or an amino acid, or CO_2R_{14} where R_{14} is hydrogen, alkyl, haloalkyl, aryl or arylalkyl,

R_9 is alkyl, haloalkyl, aryl, arylalkyl, $C(O)R_{13}$ where R_{13} is as previously defined, or $Si(R_{15})_3$ where each R_{15} is independently hydrogen, alkyl or aryl,

R_{10} is hydrogen, alkyl, haloalkyl, amino, aryl, arylalkyl, an amino acid, alkylamino or dialkylamino,

R_{11} is hydrogen, alkyl, arylalkyl, alkenyl, aryl, an amino acid, $C(O)R_{13}$ where R_{13} is as previously defined, or CO_2R_{14} where R_{14} is as previously defined,

R_{12} is hydrogen, alkyl or aryl, or

R_{11} and R_{12} taken together with the nitrogen to which they are attached comprise pyrrolidinyl or piperidinyl,

the drawing "---" represents either a single bond or a double bond, preferably a double bond,

T is independently hydrogen, alkyl or aryl, and

X is O, NR_{12} or S, preferably O,

including pharmaceutically acceptable salts and derivatives thereof in admixture with a dermatologically acceptable carrier.

2. (Previously presented) The method according to claim 1 wherein said one or more compounds of the formula (II) comprise equol and dehydroequol.

3. (Previously presented) The method according to claim 1 which is a method for reducing the formation of skin cancer.

4. (Previously presented) The method according to claim 3 wherein skin cancer is selected from basal cell carcinoma, squamous cell carcinoma and malignant melanoma.

5. (Previously presented) The method according to claim 1 wherein the composition promotes and/or enhances the repair of UV-induced mutagenic damage by one or more of increasing the rate of repair of cyclobutane pyrimidine dimers, promoting the formation of metallothionein, and decreasing p53 expression.

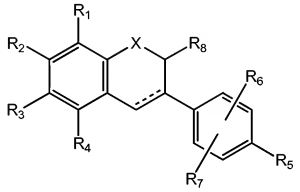
6. (Canceled)

7. (Canceled)

8. (Canceled)

9. (Currently Amended) The method according to any of claims 1 to 5 wherein the composition comprises 20 μM to 500 mmol of compounds of the formula (II).

10. (Withdrawn) Use of one or more compounds of the formula (II)

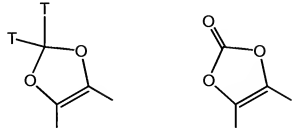


(II)

in which

R_1,R_2, R_3 and R_4 are independently hydrogen, hydroxy, OR_9, $OC(O)R_{10}$, $OS(O)R_{14}$, CHO, $C(O)R_{10}$, COON, CO_2R_{10}, $CONR_{11}R_{12}$, alkyl, haloalkyl, arylalkyl, alkenyl, alkynyl, aryl, heteroaryl, alkylaryl, alkoxyaryl, thio, alkylthio, amino, alkylamino, dialkylamino, nitro or halo, or

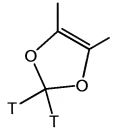
R_3 and R_4 are as previously defined, and R_1 and R_2 taken together with the carbon atoms to which they are attached form a five-membered ring selected from

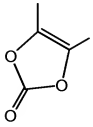


R_1 and R_4 are as previously defined, and R_2 and R_3 taken together with the carbon atoms to which they are attached form a five-membered ring selected from

, or

R_1 and R_2 are as previously defined, and R_3 and R_4 taken together with the carbon atoms to which they are attached form a five-membered ring selected from





and

wherein

R_5, R_6 and R_7 are independently hydrogen, hydroxy, OR_9, $OC(O)R_{10}$, $OS(O)R_{10}$, CHO, $C(O)R_{10}$, COOH, CO_2R_{10}, $CONR_{11}R_{12}$, alkyl, haloalkyl, arylalkyl, alkenyl, alkynyl, aryl, heteroaryl, thio, alkylthio, amino, alkylamino, dialkylamino, nitro or halo,

R_8 is hydrogen, hydroxy, alkyl, aryl, amino, thio, $NR_{11}R_{12}$, $CONR_{11}R_{12}$, $C(O)R_{13}$ where R_{13} is hydrogen, alkyl, aryl, arylalkyl or an amino acid, or CO_2R_{14} where R_{14} is hydrogen, alkyl, haloalkyl, aryl or arylalkyl,

R_9 is alkyl, haloalkyl, aryl, arylalkyl, $C(O)R_{13}$ where R_{13} is as previously defined, or $Si(R_{15})_3$ where each R_{15} is independently hydrogen, alkyl or aryl,

R_{10} is hydrogen, alkyl, haloalkyl, amino, aryl, arylalkyl, an amino acid, alkylamino or dialkylamino,

R_{11} is hydrogen, alkyl, arylalkyl, alkenyl, aryl, an amino acid, $C(O)R_{13}$ where R_{13} is as previously defined, or CO_2R_{14} where R_{14} is as previously defined,

R_{12} is hydrogen, alkyl or aryl, or

R_{11} and R_{12} taken together with the nitrogen to which they are attached comprise pyrrolidinyl or piperidinyl,

the drawing "---" represents either a single bond or a double bond, preferably a double bond,

T is independently hydrogen, alkyl or aryl, and

X is O, NR_{12} or S, preferably O,

including pharmaceutically acceptable salts and derivatives thereof in admixture with a dermatologically acceptable carrier for the manufacture of a topical composition for promoting repair of UV-induced, DNA mutagenic damage in skin and/or enhancing defense against UV-induced DNA mutagenic damage in skin.

11. (Withdrawn) Use according to claim 10 wherein said one or more compounds of the formula (II) comprise equol and dehydroequol.

12. (Withdrawn) Use according to claim 10 which is a method for preventing the formation of skin cancer.

13. (Withdrawn) Use according to claim 12 wherein skin cancer is selected from basal cell carcinoma, squamous cell carcinoma and malignant melanoma.

14. (Withdrawn) Use according to claim 10 wherein skin is protected from DNA mutagenic damage by one or more of increasing the rate of repair of cyclobutane pyrimidine dimers, promoting the formation of metallothionein, and decreasing p53 expression.

15. (Withdrawn) Use according to claims 10 to 14 wherein the composition is administered before, during and/or after UV exposure.

16. (Withdrawn) Use according to claim 15 wherein the composition is administered before UV exposure.

17. (Withdrawn) Use according to claim 15 wherein the composition is administered before and after UV exposure.

18. (Withdrawn) Use according to claims 10 to 17 wherein the composition comprises 20 μm to 500 mmol of compounds of the formula (II).

19. (Withdrawn) Use of compounds of the formula (II) for promoting repair of UV-induced, DNA mutagenic damage in skin and/or enhancing defense against UV-induced DNA mutagenic damage in skin.

20. (Previously presented) The method according to any of claims 1 to 5 wherein the composition comprises a cosmetic or sunscreen composition.

21. (Withdrawn) A use according to claims 10 to 19 wherein the composition comprises a cosmetic or sunscreen composition.

22. (Withdrawn) A cosmetic or sunscreen composition which comprises one or more compounds of the formula (II) as hereinbefore defined in association with one or more dermally acceptable carriers or excipients.

23. (Withdrawn) A cosmetic composition according to claim 22 which comprises a make-up or foundation composition.

24. (Previously presented) The method according to claim 9, wherein the composition comprises a cosmetic or sunscreen composition.